

wherein an edge of the light-transmissive sheet-like body placed between said converging optical system and said reflector is detected based on a difference between two types of information, said two types of information including information of said illuminating light which is led to said light detecting means through said edge and another information of said illuminating light which bypasses said edge and is led to said light detecting means.

3. (Amended) An apparatus according to claim 1, further comprising a plurality of converging optical systems wherein said converging optical systems are spaced from each other along the length of said light-transmissive sheet-like body.

4. (Amended) An apparatus according to claim 3, further comprising:
a plurality of light detecting means; and
processing means for processing information obtained by said plurality of light detecting means to calculate the length of said light-transmissive sheet-like body.

6. (Amended) An apparatus according to claim 5, wherein said telecentric optical system comprises:
a condenser lens disposed on a side closer to said reflector; and
an aperture member disposed at a focal point of said condenser lens on a side closer to said light detecting means.

Please add the following new claims:

10. (New) An apparatus according to claim 1, wherein said light detecting means is a CCD camera.

11. (New) An apparatus for detecting a light-transmissive sheet-like body, comprising:
a light source unit for emitting illuminating light;
a reflector for reflecting the illuminating light;
image capturing means for capturing as an image the illuminating light which is reflected by said reflector;

a converging optical system for leading the illuminating light reflected by said reflector to said light detecting means; and
an image processor for processing images captured by the image capturing means,
wherein an edge of the light-transmissive sheet-like body placed between said converging optical system and said reflector is detected based on a difference between two types of information, said two types of information including information of said illuminating light which is led to said light detecting means through said edge and another information of said illuminating light which bypasses said edge and is led to said light detecting means.

12. (New) An apparatus according to claim 11, wherein said image processor determines the positions of edges of said images; and

said image processor determines the length of the light-transmissive sheet-like body based on the positions of edges.

13. (New) An apparatus according to claim 11, wherein said image processor scans the images captured by the image capturing means in the direction in which the light-transmissive sheet-like body is fed;

said image processor detects the image density;

said image processor determines the position of an edge of said image to be where the image density changes by a predetermined amount.

14. (New) An apparatus according to claim 13, wherein said image processor determines the length of the light-transmissive sheet-like body based on the difference between the positions of edges detected in the image.

15. (New) An apparatus according to claim 1, wherein said reflector reflects said illuminating light in a direction opposite to a direction in which said illuminating light comes to said reflector.

16. (New) An apparatus for detecting a light-transmissive sheet-like body, comprising:
a light source unit for emitting illuminating light;
light detecting means for detecting the illuminating light; and
a converging optical system for leading the illuminating light to said light detecting means,

wherein an edge of the light-transmissive sheet-like body placed between said light source unit and said converging optical system is detected based on a difference between two types of information, said two types of information including information of said illuminating light which is led to said light detecting means through said edge and another information of said illuminating light which bypasses said edge and is led to said light detecting means.

17. (New) An apparatus according to claim 1, wherein the illuminating light passes through the light-transmissive sheet-like body twice before entering said light detecting means.
